Johnson Reservoir
2009 Fall Survey Summary

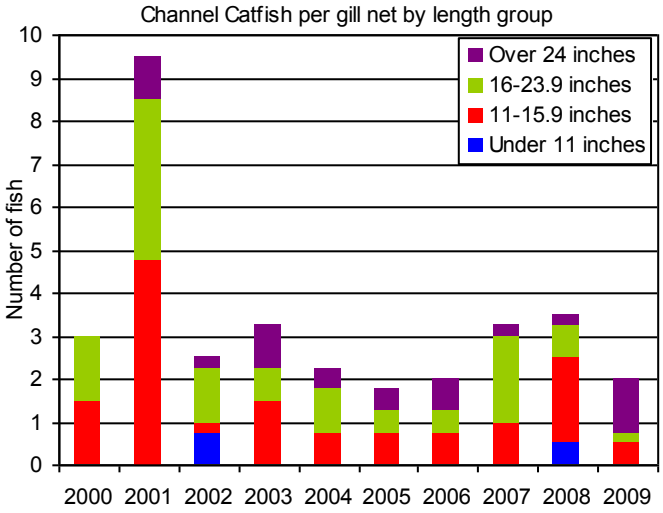
Brad Eifert, Fisheries Biologist

The following text and graphs are the result of netting surveys completed during October 2009 at Johnson Reservoir. For comparative purposes it also shows results from previous years. Fish populations are sampled each fall at Johnson using gill and frame nets. Gill nets are used to sample fish found primarily in open water, such as walleye, while frame nets are used to sample shoreline oriented fish species, such as crappie. The nets are set each year at approximately the same locations and dates as previous years. This reduces variability and allows for comparisons of species abundance and size distribution. The following graphs show the total number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs.

Channel Catfish

While there was a slight decline in the channel catfish catch, abundance remains near the long term average. Johnson has not historically produced high densities of channel catfish, but normally yields some quality sized fish. 2009 netting results indicate fair numbers of catfish between 11 and 16 inches and good numbers of catfish greater than 24 inches present in the reservoir. The average length of catfish collected in the survey was 22 inches and several catfish larger than 25 inches were collected.

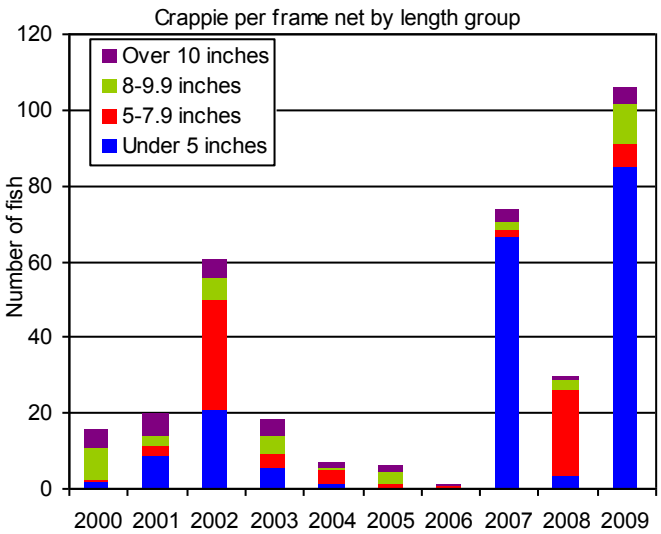
Johnson should continue to offer fair opportunities for catfish anglers, with good chances to catch a quality sized channel catfish.



Crappie

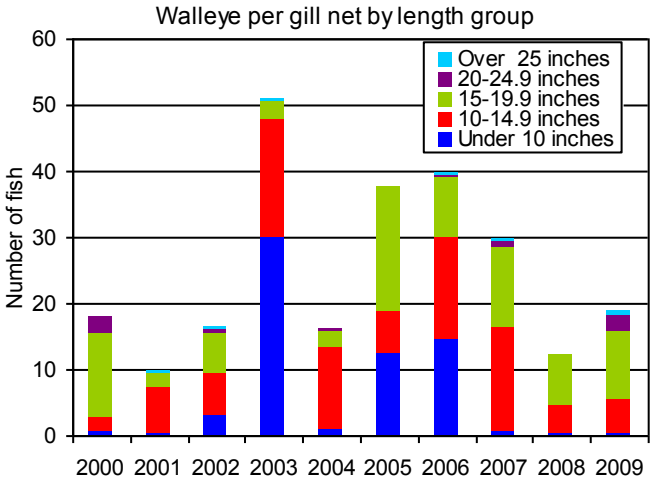
Survey results last fall at Johnson for crappie looked promising, as the catch was the highest in recent history. The majority of the catch consisted of young-of-the-year fish, which continues the three year trend of excellent crappie production. Fish produced in 2007 and 2008 appear to have recruited successfully, as both year classes were well represented in the sample. Crappie from the 2008 year class ranged from six to eight inches. Excluding young-of-the-year crappie, the 2007 year class was the most abundant age class collected during the survey. These two year old crappie ranged from 9 to 11 inches and should provide good opportunities for harvest the next couple years. Few fish older than age-2 were collected, likely a result of the poor year classes produced during the 2004-2006 time period.

Improved abundance of crappie at Johnson should provide good angling opportunities during 2010. Anglers should also find increased numbers of crappie larger than 10 inches.

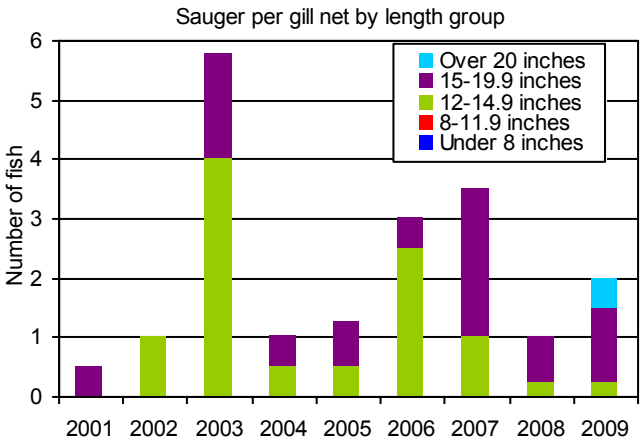


Walleye/Sauger

Walleye catch rates rebounded in 2009, as the gill net catch improved to 19 fish per net. Most of the walleye sampled at Johnson were between 10 and 20 inches, although the abundance of walleye greater than 20 inches was the highest in recent years. Excellent year-classes during the 2002-2006 time period are providing most of the walleye in this size group. Walleye recruitment remains consistent, as age-0 through age-6 walleye were all well represented in the survey. Age-1 through age-3 walleye were most abundant. There are good numbers of age-1 and age-2 walleye ranging from 12 to 14 inches, many of which will contribute to the walleye harvest during 2010. The age-3 fish range from 15 to 19 inches. The average walleye length was 17 inches and approximately 70% of the walleye sampled were larger than 15 inches. The largest walleye collected during the survey was 29 inches.



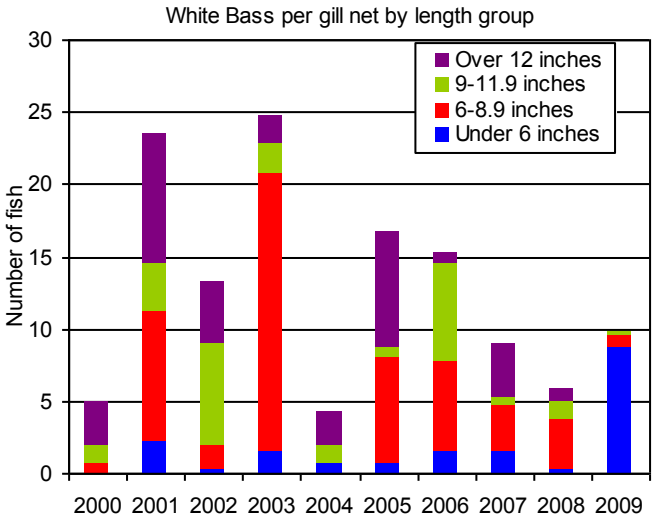
Sauger abundance was slightly improved as there were 2.0 fish/net sampled. The average length of sauger in the survey was 17.8 inches and they ranged in length from 12 to 20 inches. Sauger are not stocked in Johnson, but are stocked in Midway, Gallagher and Plum Creek Reservoirs.



The improved abundance of walleye at Johnson should result in better catch rates during 2010. In addition, a high percentage of the current walleye population is larger than the 15 inch minimum size limit and there is also an excellent population of walleye greater than 20 inches. Good opportunities also exist for catching sauger. There is a 15-inch minimum size limit on walleye and sauger at Johnson and anglers may only keep one fish larger than 22 inches per day.

White Bass

The catch of white bass increased during the 2009 survey, but the majority of the fish sampled were less than six inches. Approximately 98% of the fish collected were age-0 white bass, which was the largest year-class of this age group sampled in the last ten years. There were very few fish larger than six inches collected in the survey. Although abundance of large white bass was lower, sampling efficiency may have been reduced due to colder than normal water temperatures.

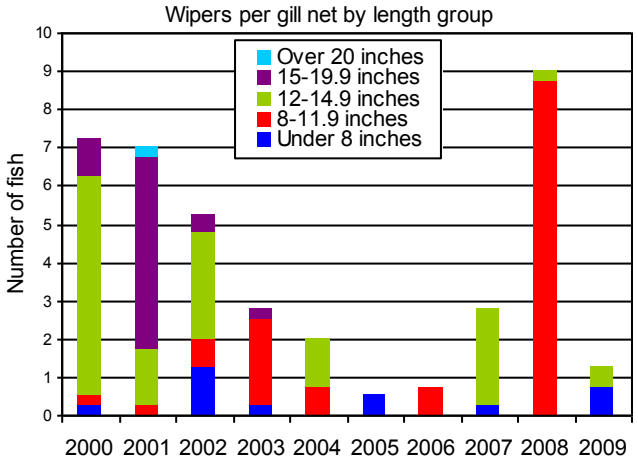


Anglers should find numerous small white bass during the 2010 fishing season, but larger fish might be harder to catch.

Wipers

Wiper catch has been sporadic the past several years at Johnson. The 2008 catch of 9.0 fish/net was the highest in several years, but net catches during the 2009 survey dropped to only 1.25 fish/net. Only two age-classes of wipers were collected; age-0 fish averaged 5.5 inches and age-1 wipers averaged 12.0 inches. Although they were well represented in the 2008 survey, no fish from the 2007 year-class were sampled last fall. Wiper stocking rates were increased in 2007 to help improve abundance, but due to poor wiper survival in the hatchery system only one-third of the requested amount was stocked during 2009. Wipers are scheduled to be stocked in 2010 at a rate of 20 fish/acre.

Although the wiper population is lower than the long term average, anglers should still find fair angling opportunities.



Additional Information About Johnson Reservoir

Water Level Forecasts for 2010

With improving water levels in Lake McConaughy, Central Nebraska Public Power and Irrigation District (CNPPID) has decided to provide downstream irrigators a full allotment of irrigation water for the 2010 growing season. This is the first time since 2004 that CNPPID has scheduled a full irrigation delivery. With this full release, it is assumed that water levels at Johnson Reservoir should remain stable during the 2010 season. Unforeseen circumstances such as drought, abnormally low river flow (especially in the South Platte River) and high irrigation demand during periods of hot weather could possibly cause some short-term draw downs, but they should not interfere with access to the reservoir.

Current lake elevations for Johnson Reservoir, as well as additional information about the CNPPID System can be found on their web page: http://www.cnppid.com/Elevation_Flows2.htm

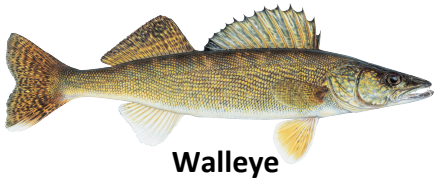
Fish Stocking

During 2009, fish stocking consisted of 219,525 walleye fingerlings, 14,763 wiper fingerlings, and 66,610 yellow perch fingerlings.

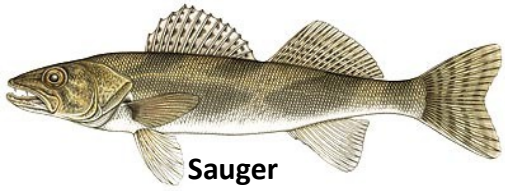
Fish stockings scheduled for Johnson Reservoir in 2010 include 218,900 walleye fingerlings and 43,780 wiper fingerlings.

Lake Maps

A depth contour map of Johnson Reservoir, as well as many other Nebraska Lakes can be found here:
http://www.ngpc.state.ne.us/fishing/programs/lakemapping/pdfs/Johnson.pdf



Walleye



Sauger

For additional information about fisheries management at Johnson Reservoir, please contact the NGPC Kearney office at 308-865-5310 or by email at the addresses listed below.

District Supervisor: Brad Newcomb, brad.newcomb@nebraska.gov
Biologist: Brad Eifert, brad.eifert@nebraska.gov